CLAIMS

What is claimed is:

1. A method for fault management in a distributed network management station comprising:

5   initiating a first device coupled to a network;

broadcasting an information packet to a plurality of devices coupled to the network; and

resolving status of said first device coupled to said network, wherein said resolving results in said distributed network management station having a defined

10   master device.

2. The method as recited in Claim 1, wherein said first device initiates as a secondary device.

15   3. The method as recited in Claim 1, wherein said information packet comprises a participating-device internet protocol (IP) of said first device.

4. The method as recited in Claim 3, wherein said information packet also comprises a participating-device message authentication code (MAC) of said first

20   device.

5. The method as recited in Claim 3, wherein said information packet further comprises information regarding the previous state of said first device.

6. The method as recited in Claim 3, wherein said information packet additionally comprises information regarding a current state of said first device.

7. The method as recited in Claim 3, wherein said information packet further comprises information regarding a total system-up-time of said first device.

8. The method as recited in Claim 1, wherein said status between said first device and said plurality of devices is resolved by an evaluation of each said information packet from said first device and said plurality of devices.

9. The method as recited in Claim 1, wherein said distributed network management station integrates plug-and-play capability of each of the plurality of devices into said network.

10. The method as recited in Claim 1, wherein said distributed network management station integrates scalability of each of the plurality of devices into said network.

11. The method as recited in Claim 1, wherein said distributed network management station integrates self-healing capabilities of each of the plurality of devices into said network.

5   12. A method for fault management in a distributed network management station comprising:

initiating a first device coupled to a network, said first device initiating as a secondary device;

broadcasting an information packet to a plurality of devices coupled to the

10   network;

resolving status of said first device coupled to said network, wherein said resolving results in said distributed network management station having a defined master device and multiple secondary devices; and

initiating a fail-over process, wherein said fail-over process results in said

15   secondary devices re-evaluation of said master device.

13. The method as recited in Claim 12, wherein said information packet broadcast by said first device further comprises:

transmitting a participating-device internet protocol (IP) of said first device,

transmitting a participating-device message authentication code (MAC) of said first device,

transmitting information regarding the previous state of said first device,

transmitting information regarding the current state of said first device, and

transmitting information regarding the total system-up-time of said first device.

14. The method as recited in Claim 12, wherein said status between said first device and said plurality of devices is resolved by an evaluation of each said information packet from said first device and said plurality of devices.

15. The method as recited in Claim 12, wherein said distributed network management station integrates plug-and-play capability of each of the plurality of devices into said network.

16. The method as recited in Claim 12, wherein said distributed network management station integrates scalability of each of the plurality of devices into said network.

17. The method as recited in Claim 12, wherein said distributed network management station integrates self-healing capabilities of each of the plurality of devices into said network.

5   18. The method as recited in Claim 12, wherein said secondary devices re-evaluation occurs due to a loss of communication with said master device.

19. The method as recited in Claim 18, wherein said secondary devices re-evaluation comprises questioning said master device for state or status.

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20. The method as recited in Claim 19, wherein said state or status of said master device comprise:

said master device in a paused state, said master device in a crashed state, transmission control protocol (TCP) disconnect from said master device, or overall

15 loss of master device.

21. A computer system comprising:

a bus;

a memory unit coupled to said bus; and

a processor coupled to said bus, said processor for executing a method for fault

management in a distributed network management station comprising:

a first device coupled to a network, said first device initiating as a

secondary device;

an information packet broadcast to a plurality of devices coupled to the

network;

a defined master device and at least one secondary device; and

a fail-over process, wherein said fail-over process results in said

secondary device re-evaluating said master device.

22. The computer system of Claim 21, wherein said information packet

comprises:

a participating-device internet protocol (IP) of said first device, a participating-

device message authentication code (MAC) of said first device, information

regarding the previous state of said first device, information regarding the current

state of said first device, and information regarding the total system-up-time of said

first device.

23. The computer system of Claim 21, wherein said status between said first device and said plurality of devices is resolved by said first device evaluating each said information packet from said first device and any of said plurality of devices.

5   24. The computer system of Claim 21, wherein said distributed network management station comprises:

plug-and-play capability of said first device, scalability of said first device, and self-healing capability of said first device.

10   25. The computer system of Claim 21, wherein said secondary device re-evaluating said master device due to a loss of communication with said master device.

26. The computer system of Claim 25, wherein said secondary device re-15   evaluating comprises questioning said master device for state or status.

27. The computer system of Claim 26, wherein said state or status of said master device comprise:

a paused state, a crashed state, a transmission control protocol (TCP) 20   disconnect, or overall loss of master device.

28.   A computer-usable medium having computer-readable program code

embodied therein for causing a computer system to perform a method for fault

management in a distributed network management station comprising:

initiating a first device coupled to a network;

5   broadcasting an information packet to a plurality of devices coupled to the

network; and

resolving status of said first device coupled to said network, wherein said

resolving results in said distributed network management station having a defined

master device.

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29.   The computer-usable medium of Claim 28, wherein said first device

initiates as a secondary device.

30.   The computer-usable medium of Claim 28, wherein said information

15   packet comprises a participating-device internet protocol (IP) of said first device.

31.   The computer-usable medium of Claim 30, wherein said information

packet also comprises a participating-device message authentication code (MAC) of

said first device.

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32. The computer-usable medium of Claim 30, wherein said information packet further comprises information regarding the previous state of said first device.

5   33. The computer-usable medium of Claim 30, wherein said information packet additionally comprises information regarding a current state of said first device.

34. The computer-usable medium of Claim 30, wherein said information

10   packet further comprises information regarding a total system-up-time of said first device.

35. The computer-usable medium of Claim 28, wherein said status between said first device and said plurality of devices is resolved by said first device

15   evaluating each said information packet from said first device and any of said plurality of devices.

36. The computer-usable medium of Claim 28, wherein said distributed network management station integrates plug-and-play capability of said first device

20   into said network.

37. The computer-usable medium of Claim 28, wherein said distributed network management station integrates scalability of said first device into said network.

38. The computer-usable medium of Claim 28, wherein said distributed network management station integrates self-healing capabilities of said first device into said network.

39.   A mechanism for creating a distributed network management station comprising:

a means for initiating a first device coupled to a network;

a means for broadcasting an information packet to a plurality of devices coupled to the network; and

a means for resolving status of said first device coupled to said network, wherein said means for resolving results in said distributed network management station having a defined master device.

40. The mechanism for creating a distributed network management station as described in Claim 39, wherein said first device initiates as a secondary device.

41. The mechanism for creating a distributed network management station as described in Claim 39, wherein said information packet comprises a means for a participating-device internet protocol (IP) of said first device.

5   42. The mechanism for creating a distributed network management station as described in Claim 41, wherein said information packet also comprises a means for a participating-device message authentication code (MAC) of said first device.

43. The mechanism for creating a distributed network management station as described in Claim 41, wherein said information packet further comprises a means for providing information regarding the previous state of said first device.

44. The mechanism for creating a distributed network management station as described in Claim 41, wherein said information packet additionally comprises a means for providing information regarding a current state of said first device.

45. The mechanism for creating a distributed network management station as described in Claim 41, wherein said information packet further comprises a means for providing information regarding a total system-up-time of said first device.

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46. The mechanism for creating a distributed network management station as described in Claim 39, wherein said status between said first device and said plurality of devices is resolved by said first device utilizing an evaluation means for each said information packet from said first device and any of said plurality of

5   devices.

47. The mechanism for creating a distributed network management station as described in Claim 39, wherein said distributed network management station comprises a means for integrating plug-and-play capability of said first device into

10   said network.

48. The mechanism for creating a distributed network management station as described in Claim 39, wherein said distributed network management station comprises a means for integrating scalability of said first device into said network.

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49. The mechanism for creating a distributed network management station as described in Claim 39, wherein said distributed network management station comprises a means for integrating self-healing capabilities of said first device into said network.

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